

Cheyney Group Design and Development Flame Retardant Materials

The flame-retardant paper material, Nomex, is designed by Cheyney Design and Development as a special solution for manufacturers and other users who have this particular need. Nomex has many applications which include the production of personal protection wear to protect Formula 1 drivers and fire-fighters from sudden combustion. It is also incorporated in the fireproof honeycomb framework the Airbus A380 wide-body aircraft.

Nomex flame-retardant paper material contains heavy-metal additives, such as bismuth to withstand high temperature and thus prevent flash fire. This paper had been manufactured for many years, with the remaining scraps or small cuts of the material being baled and stored because of resistance to fire and, therefore, the difficulty of proper disposal without harming the environment.

[Cheyney Design and Development](#) has developed a special x-ray inspection process to accurately measure the concentration of heavy metal components, by core sampling and analysing the bales. This has resulted in recovery of nearly 2500 tonnes of material, with blending of the paper to specific grades, producing both financial and sustainability benefits.

Not only does Cheyney invest in designing and manufacturing efficient high-tech equipment; it likewise sees to it that the environment does not suffer from the disposal of the materials produced and discarded during the process of production. This is how it should be for all truly concerned industries. It also allows them to recover valuable recyclable materials, which redounds to financial savings as well as prevents the unwise depletion of resources of our planet.

Companies such as Cheyney deserve to be appreciated and emulated for the example they set as being environmentally-conscious or concerned. High-tech does not need to be also high-impact with regards to the ecology of our planet. The goal is to keep products as low-impact as possible while trying to attain high-efficiency and producing high-value results for the consumers in general. There is where Cheyney concentrates its research and development efforts and we can see how it is succeeding in the effort.